Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

In the Matter of

Interpretation of the Commission's Rules to
Permit the Use of Automated Advisory Equipment and
Procedures on Aviation
Unicom Frequencies

PEDERAL COMMUNICATIONS COMMISSION OFFICE OF SECRETARY

PETITION FOR RULE INTERPRETATION

1. Potomac Aviation Technology Corporation (PATC) hereby requests THAT the Commission issue an Order permitting the use of certain automated advisory equipment and procedures by Unicom stations on general aviation airfields. Such an Order will serve the public interest by increasing the accuracy and reliability of advisory communications at general aviation airfields.

I. SUMMARY AND STATEMENT OF INTEREST

- 1. PATC is the inventor of SuperUnicom, an automated Unicom advisory system. PATC has held a developmental license from February 5, 1994, to explore the utility of SuperUnicom. During the developmental period, minor problems with the system have been resolved, and all sectors of the general aviation community have expressed approval of and interest in acquiring SuperUnicom systems.
- 2. The Commission's Rules currently allow each general aviation airfield, where there is no or only a part-time Federal Aviation Administration (FAA) presence, a license for a Unicom station. This station is authorized to give advisories and to inform aircraft of available services, e.g., fuel, repair, and available lodging, dining and automobile rental. Most general aviation airfields, however, are operated by minimum staff, and there is frequently no one available to operate the Unicom station. At the same time, with only one Unicom station per airfield, a continuously transmitting advisory system, such as an Automated Weather Observation Station, is impracticable, because the Unicom is used for other purposes. The solution to these problems is an automated system which gives advisories only when interrogated via radio.
- 3. SuperUnicom is a computerized system which transmits weather data and responds to radio check requests when interrogated by pilots. Thus, SuperUnicom provides services critical to the safety of flight quickly and accurately. SuperUnicom only transmits when interrogated and does not block the Unicom frequency when its data is not needed.
- 4. The Commission's Rules currently provide that advisories and radio checks are proper uses of the Unicom station. The Rules are silent as to whether these services are to be provided by human operators or automatic systems. PATC respectfully submits that the Commission may authorize the use of this flight safety oriented technology and place appropriate limits on its use to ensure that such systems do not interfere with other uses of Unicom frequencies, by an Order which interprets the current Rules.

DISCUSSION

AN AUTOMATED UNICOM SYSTEM IS IN THE PUBLIC INTEREST

A. Statement of the Problem.

- 5. There are currently approximately 10,000 general aviation airfields in the United States, serving light planes and helicopters for state and local government, public safety, business and pleasure purposes. FAA control towers, remote communications outlets (RCO) or flight service stations (FSS) operate on few of these airfields. Airfield communications are provided via Commission licensed Unicom stations. The Commission's Rules allow one Unicom station per airfield where there is no FAA control tower, RCO or FSS, and multiple Unicom stations where there is such an FAA presence. In the latter case, Unicom stations may provide only flight services, such as fuel and maintenance. Where there is no FAA presence or only a part-time presence, the Unicom station provides advisories and radio checks.
- 6. The flight safety information provided by Unicom stations consists of weather advisories, runway headings and conditions, and radio checks to ensure proper operation of aircraft radios. Unicom stations are also permitted to provide information about available airfield services, such as fuel, repair and aircraft hangaring or parking, and information about locally available lodging, dining and transportation.
- 7. General aviation airfields tend to operate with minimal staff, often with only the staffs of the fueling services, repair shops, and flight training schools located on the airfield. Airfields that have a person assigned as a full-time Unicom station operator are rare, because the average general aviation airfield cannot afford the expense of a full-time radio operator.

¹ See 47 C.F.R. Subpart G, § 87.213–87.217.

^{2 47} C.F.R. § 87.215(b).

^{3 47} C.F.R. § 87.213(b)(1).

Operation of the Unicom station is usually a catch—as—catch—can proposition, and the person answering calls to the Unicom may be a mechanic or fuel—pump laborer with little training in determining and reporting information needed by pilots, because no operator's license is needed to operate the Unicom.⁴ Further, general aviation airfields are often used by pilots landing at night, when the staffs of the service organizations and the airfield itself are absent. After business hours, there is rarely an operator available at the Unicom station.

- 8. One solution to the problem of providing advisories on a full-time basis is the Automated Weather Observation Station (AWOS). AWOS provides automated, regularly updated weather information on a separate frequency from the Unicom frequency, and runs 24 hours per day, every day. The drawbacks are that AWOS is priced beyond the means of most general aviation airfields, and is usually found only at FAA controlled airports. Further, AWOS is spectrally inefficient, as it requires the full-time use of a dedicated radio frequency. Finally, the AWOS frequency at an airfield may be unknown to a visiting or transient pilot, whereas looking up the Unicom frequency at an airfield is a normal part of flight planning. Even should the Unicom frequency of a specific airfield be unknown, it is easily determinable by a pilot because there are a total of eight Unicom frequencies in the United States.
- 9. In summary, Unicoms are used at general aviation airfields to provide information necessary to the safety of flight, such as weather, runway conditions and radio checks. Currently, Unicoms are insufficiently staffed at many or most general aviation airfields, leading to absence, delay, or inadequacy of this information. Solutions such as full-time staffing of the Unicom or the provision of AWOS are impracticable because of expense and late-night usage of airfields.

4 47 C.F.R. § 87.89(d)(4).

B. Proposed Solution to the Problem.

- 10. The solution this petition proposes is the use of an inexpensive, command responsive, interactive computer system that provides necessary air safety information upon demand to pilots. SuperUnicom is such a system.
- 11. SuperUnicom is invoked by "clicking" the aircraft station microphone a specified number of times: three clicks for advisory, four clicks for radio check. This comports with current general aviation practice. At many airfields, a pilot intending to land turns on the airfield lights remotely by clicking the microphone five times. Pilots are informed of the availability of SuperUnicom by a message identifying SuperUnicom and instructing pilots to click three times for advisory and four times for radio check, transmitted at intervals depending on the traffic on the Unicom frequency. In this fashion, SuperUnicom provides necessary information to pilots while avoiding occupying the Unicom frequency full time.
- 12. SuperUnicom avoids interfering with other users of the Unicom frequency by sampling traffic on the frequency and only transmitting when the frequency is quiet. Further, the unit uses a sample compiled over time to judge the general usage, and abbreviates the advisory messages in times of heavy usage.
- 13. The system is powered by batteries connected to the airfield lighting system for recharging. The entire system is small and light enough to clamp to the wind sock pole on a general aviation airfield, and transmits through the Commission approved airfield Unicom ground station transmitter. A full description of system characteristics is contained in Appendix B to this Petition.

C. Technical Issues.

14. SuperUnicom, as mentioned above, transmits information through the airfield's Unicom station. As such, no new radio technical standards are necessary. Additionally, no further licensing is necessary, as SuperUnicom is only to be used by the current airfield Unicom licensee. The power supply, computer standards, and weatherproofing will be market-driven,

and will involve no additional regulation by the Commission. All components comply with the Commission's Rules as regards unintentional radiation and other interference concerns. A full description of system technical characteristics is contained in Appendix C to this Petition.

D. An Order Authorizing Automated Unicom Advisory Systems Without Notice and Comment Procedures is Appropriate.

15. The Administrative Procedure Act provides that the requirement for full notice and comment rule making procedures...

does not apply--

(A) to interpretive rules, general statements of policy, or rule of

agency organization, procedure, or practice; or

(B) when the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefor in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest.5

The Commission's Rules also provide that "[i]n those cases where notice and public procedure thereon are not required, the Commission may issue a final order amending the rules."6

16. The Order needed to authorize the use of SuperUnicom and similar systems would be an "interpretive rule." The Rules regulating Unicom usage currently specify that Unicom stations must use modulation type A3E.7 This modulation is double-sideband analog telephony. SuperUnicom uses this modulation, and the Rules do not distinguish between computergenerated voice and human voice in telephony. The current Commission ban on automated voice on Unicom frequencies is a Private Radio Bureau interpretation, which can be reversed by an

^{5 5} U.S.C. § 553(b).

^{6 47} C.F.R. § 1.407.

^{7 &}lt;u>See</u> 47 C.F.R. § 87.131.

explanation that automatic voice systems are permitted on Unicom stations, with appropriate limitations on the systems to ensure that they do not interfere with other uses of the Unicom frequency.

- 17. There is also good cause for the Commission to find that public notice and comment is unnecessary. All relevant sectors of the aviation community have already commented on the SuperUnicom system. Appendix D to this Petition contains the comments of the FAA, the Aircraft Owners and Pilots Association, the General Aviation Manufacturer's Association, the National Business Aircraft Association, state government agencies, general aviation pilots, airfield managers and Unicom licensees. Included is the only negative comment received about SuperUnicom after several months of solicitation of comments. Because the requested Order would involve no change to spectrum allocation, technical standards or interference protection, the Petitioner submits that no party outside the general aviation community has any interest that could be affected by the proposal. Because of this, and because the requested Order involves no amendment of the Rules, the Petitioner submits that public notice and comment is unnecessary.
- 18. Finally, public notice and comment would delay the implementation of SuperUnicom. The system has been under development since April, 1993, and has been operating under developmental license since February 5, 1994. A number of problems have been solved, and the system is ready for implementation. A high level of interest has been shown in the system, and further delay in authorizing its use would only hamper the deployment of technology that increases aviation safety. Appendix E to this Petition summarizes orders received and letters of interest from customers who wish to deploy SuperUnicom at airfields.

CONCLUSION

19. By adopting an Order authorizing the use of automated advisory systems like SuperUnicom at general aviation airfields, the Commission can improve the safety of flight by providing a higher quality of aviation communications. The proposal also contains safeguards to prevent such automated systems from interfering with other uses of Unicom stations. Adoption

of the proposed Order without public notice and comment is appropriate because it is an interpretive order, and because all interested parties have already commented on the utility and desirability of such systems.

20. Therefore, PATC requests that the Commission adopt the proposed order to authorize automated advisory systems for use by Unicom licensees.

David J. Wartofsky

Director, Potomac Aviation Technology Corporation.

November 8, 1994

APPENDIX A

PROPOSED ORDER

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

In the Matter of)
Interpretation of the	3
Commission's Rules to	Ó
Permit the Use of Automated	Ó
Advisory Equipment and	Ś
Procedures on Aviation	Ś
Unicom Frequencies	Ś

ORDER

1. By this action, the Commission authorizes the use of automated advisory systems on aviation Unicom frequencies, and defines the limits on such systems.

BACKGROUND

- 2. Unicom stations provide advisory information to pilots at general aviation airfields where there is no Federal Aviation Administration presence, or only a part-time presence. Unicom stations are sometimes unattended, and may not provide the range of advisory information and equipment needed by pilots. Aviation safety is benefited by automated systems which can provide needed information to pilots.
- 3. Potomac Aviation Technology Corporation (PATC) has petitioned the Commission for a rule interpretation to allow it to deploy an automated advisory system which provides advisory information and radio checks on demand. PATC's system has been operating under developmental license since February 5, 1994.

DISCUSSION

4. Aviation communications at general aviation airfields where there is no or only a part-time Federal Aviation Administration (FAA) presence are provided by Unicom stations licensed by the Commission. These stations are authorized to transmit weather and runway advisories, radio checks, and information as to airfield and local area services. A problem arises when a Unicom station is not staffed full time, or is operated by a person who is not conversant with the type of information required by pilots to maximize the safety of flight. Few general aviation airfields are able to afford a full-time, trained Unicom operator.

- 5. Unicom stations provide advisory information to pilots. This information consists of local weather conditions, runway availability and conditions, and radio checks. Unicom stations also provide information on airfield services and area services, such as fuel, aircraft maintenance services, and ground transportation and lodging in the area of the airport. Advisory information is critical to the safety of life and property in general aviation. At many airfields, however, necessary advisory information is not always available. Few general aviation airfields can afford to provide a full-time Unicom operator. As a result, the Unicom station may be operated by a person who is not a pilot and is not fully aware of the type of information pilots need for maximum safety. Many general aviation airfields also allow landings after the business day to those who have an aircraft hangar or parking spot at the airfield. After business hours most airfields have no Unicom operators available. Because of all these factors, important advisory information is frequently unavailable at general aviation airfields.
- 6. PATC has developed an automated system that addresses this problem. The system consists of a computer that, when interrogated by a pilot, transmits advisory information and radio checks over the Unicom station. The computer receives regular updates from the airfield weather station, and transmits the information to pilots when interrogated. The system also provides a radio check function by echoing the pilot's radio check call when ordered. The method for invoking these functions is to click the microphone of the aircraft radio a specified number of times, depending on the function desired. This comports with current general aviation practice. At many airfields, a pilot can turn on the runway lights by clicking the microphone five times. The system also provides a feature whereby, at periodic intervals, the system identifies its airfield and gives brief instructions for its use. All information is passed by computer—generated voice transmission. The system can be used to provide Unicom communications at times when there is no Unicom operator available and after the airfield operating hours.
- 7. PATC's system avoids the threat of overriding other Unicom transmissions by monitoring the frequency. The system will not transmit when it detects other transmissions on the frequency. Further, when the system detects heavy usage over a specified period, it abbreviates the advisory messages transmitted, in order to minimize frequency usage. Because the system passes information quickly and efficiently, it actually uses less time on the frequency than human operators. Finally, because the system uses only currently assigned Unicom frequencies, it is spectrally efficient, providing better aviation safety communications with no increase in frequency usage.
- 8. We believe that systems of this type would improve the safety of general aviation by providing up-to-date advisory information to pilots. For this reason, we are interpreting the Rules to allow automated systems to be used by Unicom licensees. We are also defining certain characteristics that any such system must have in order to be used to provide automated Unicom communications. This interpretation of the Rules affects Part 87 Subpart G of our Rules, 47 C.F.R. §§ 87.213-87.217.
- 9. All Unicom licensees will be authorized to use commercially available automatic systems to provide advisory communications and other Unicom functions. No system will be allowed to provide information other than authorized Unicom communications, and all rules for Unicom usage apply to automatic systems.
- 10. Automated Unicom advisory systems shall be responsive to pilot command. No system shall transmit on a full time basis. Only brief periodic messages announcing the

presence of the system and instructions for its use will be permitted. All other communications shall respond to pilot requests. No system shall interfere with other use of the Unicom frequency.

- 11. Automated systems shall transmit through Commission authorized aviation ground station radios, which shall adhere to all technical requirements for aviation ground station Unicom radios and shall be approved by the Commission. Automated systems shall meet all other applicable Commission rules and technical standards for unintentional radiators.
- 12. The Commission issues this Order without public notice and comment in this proceeding because this order is an interpretive rule in accordance with the Administrative Procedure Act¹, and because we find that public notice and comment is unnecessary because all interested parties have already commented on the utility and desirability of automated advisory systems.²

I <u>See 5 U.S.C. § 553(b)(3)(A)</u>

² See 5 U.S.C. § 553(b)(3)(B), 47 C.F.R. § 1.407.

CONCLUSION

- 13. Adherence to these standards will allow automatic advisory systems to operate through Unicom stations. Such systems will improve the availability and quality of safety related communications to pilots, while at the same time ensuring no interference to other uses of Unicom stations.
- 14. THEREFORE, IT IS ORDERED that automated Unicom communications systems that comply with the criteria established in this Order shall be authorized for use by Unicom licensees.

FEDERAL COMMUNICATIONS COMMISSION

APPENDIX B

TRANSMITTER CHARACTERISTICS

FCC APPROVED AVIATION TRANSCEIVER SPECIFICATIONS

Manufacturer Terra Avionics

Model TPX 720

Communications Channels 720

Frequency Range (25 KHz) 118.000 – 135.975 Mhz

Operating Temperature -20 C to 50 C

Size $3.2W \times 1.9D \times 9.5H$

Weight 2.1 lbs

RECEIVER

Sensitivity Less than 1 uW for 6db (S+N)/N

118 through 136 Mhz Somewhat greater

Selectivity 25 KHz

50db at +20 KHz

Spurious and Image Rejection Greater than 60db

Squelch Selectivity 3 uV to 200 uV

Adjustable Carrier AGC Type

TRANSMITTER

Power Output

HI 2 Watts Carrier (8 Watts PEP)

LOW .5 Watts Carrier (2 Watts PEP)

Frequency Stability .002%

Spurious & Harmonics Greater than 50db below Carrier

Modulation

Type 6A3

Percent 80% Min.

Antenna Impedance 50 Ohms

APPENDIX C

SUPERUNICOM TECHNICAL CHARACTERISTICS

SIZE

24" x 24" x 16"

WEIGHT

180 lbs

TEMPERATURE

-20 to +55 C

EXTERNAL POWER 2 hours per day 90-260 VAC, Max 400 Watts, 200 Watts Typical

when charging.

TRANSMITTER

FCC approved low-power, aviation band transceiver operates

anywhere on the 118-135.975 MHz Aviation band.

FEATURES

Always Ready:

The automated system never misses a pilot's call for information.

Advisory:

System responds on demand, 24 hours a day, with all the

information needed by an inbound or departing aircraft: Wind, Temperature, Dewpoint, Altimeter, Density Altitude, and

Runway (when applicable).

Radio Check:

The system always provides on demand a perfect Radio-Check

that is essential to flight safety, day, night, VFR or IFR.

Instructions:

SuperUnicom provides a controlled announcement of its

availability informing pilots that are unfamiliar with the services

available.

Warnings:

Interprets significant trends and draws pilots attention to Possible

Ground Fog, Crosswinds, Windshear, and high Density Altitude.

Runway Use:

System suggests a specific runway to use when winds and traffic

indicate that such a call is safe to be made.

NOTAMS:

Allows manager to add a NOTICE TO AIRMEN or any special

messages as needed.

System Sleep:

System can "disappear" during times when personnel are

providing services; and to reappear when personnel are no longer

available. System will automatically disappear when the frequency becomes too busy with the transmissions of others.

INSTALLATION

Physical:

Universal Clamp design accommodates all WindSock poles and

mounting conditions.

Electrical:

External power lead wires to windsock lighting circuit using

connectors provided.

CALIBRATION

Direction:

Align factory calibrated sensor arm to magnetic North using

precision compass provided.

Altimeter:

Determine the initial altimeter setting using a calibrated aircraft

altimeter or comparable source. Use knobs on front of SuperUnicom to set current Altimeter Setting.

Frequency:

Adjust thumbwheel switches to the airport's published Common

Traffic Advisory Frequency.

APPENDIX D

AVIATION COMMUNITY COMMENTS

FAA - Mgr General Aviation & Commercial Division

FAA - Mgr Airspace Rules & Aeronautical Information Division.

AOPA - VP Regulatory Policy

NBAA - Sr Mgr. Flight Technology

GAMA - VP Operations

NAVY - Head of Trainer Aircraft & Undergraduate Flight Training

CONGRESS - Lee Hamilton, Joint Economic Committee

FAA TECH. INTERCHANGE GROUP - Doyle Peed, Chairman

800 Independence Ave., S.W. Washington, D.C. 20591



OCT | 9 | 1994

Mr. George Dillion FCC Private Radio Bureau Aviation and Marine Branch Mail Stop 1700C2 Washington, DC 20554

Dear Mr. Dillion:

My staff has informed me that the Federal Communications Commission (FCC) rulemaking on behalf of the SuperUnicom is in progress. The SuperUnicom technology is currently in operation under a Developmental License at Potomac Airfield and Bay Bridge Airport located in the State of Maryland.

The SuperUnicom system sufficiently emulates existing and approved UNICOM/CTAF services. Its use should be currently authorized under existing FCC regulations.

This technology will enhance pilot and public safety by providing landing area advisories on an around-the-clock basis using frequencies which are already assigned. The system will be of greatest importance at airports which do not have operating control towers. I urge the FCC to expedite licensing.

Sincerely,

Original signed by: ROBERT M. BARTON

Louis C. Cusimano
Acting Manager, General Aviation
and Commercial Division



U.S. Department of Transportation

800 Independence Ave., S.W Washington, D.C. 20591

Federal Aviation Administration

TIEC - 8 1998

Mr. David Wartofsky Potomac Airfield 10300 Glen Way Fort Washington, MD 20744

Dear Mr. Wartofsky:

Thank you for the information on your "SuperUnicom" system.

The Federal Aviation Administration (FAA) encourages the establishment and use of UNICOM frequencies for operations at non-towered airports; however, the FAA does not require or regulate UNICOM operations. This is strictly a function of the Federal Communications Commission (FCC) which requires compliance with Part 87 of the FCC regulations for all UNICOM operators. The FCC has the authority to issue an aircraft station license to operate on UNICOM frequencies; any change from the limitations of the original UNICOM license must be coordinated and approved by the FCC.

Additional information on this matter can be obtained from the FCC offices by calling the FCC Consumer Services, Gettysburg, Pennsylvania, on (717) 337-1212.

If you have further questions on this matter, please contact Ellen Crum on extension 7-9859.

We hope this information is helpful.

Sincerely,

Makold W. Bécker

Manager, Airspace-Rules and

Aeronautical Information Division



AIRCRAFT OWNERS AND PILOTS ASSOCIATION

421 Aviation Way • Frederick, MD 21701-4798 Telephone (301) 695-2000 • FAX (301) 695-2375

September 16, 1994

George Dillion FCC Private Radio Bureau Aviation & Marine Mail Stop 1700C2 Washington, DC 20554

Dear Mr. Dillion:

The Aircraft Owners and Pilots Association (AOPA) represents over 330,000 pilots who own and operate general aviation aircraft worldwide. AOPA supports the development and implementation of new technology when it demonstrates the potential to enhance safety and efficiency of general aviation operations.

AOPA has reviewed the SUPERUNICOM system, and believes that this system has the potential to enhance safety and efficiency at general aviation airports by providing around-the-clock advisory services over presently assigned Common Traffic Advisory Frequencies (CTAF). This appears to do this without impeding communications the frequency, and does not interfere with the operation of radio-controlled airport lighting.

Accordingly, AOPA encourages the Federal Communications Commission seriously consider authorizing the use of SUPERUNICOM for advisory services under current FCC regulations.

Sincerely,

Douglás S. Helton Vice President Regulatory Policy

cc: Mr. David Wartofsky

1200 EIGHTEENTH ST., NW SUITE 200 WASHINGTON, DC 20036-2598

(202) 783-9000 FAX(202) 331-8364

April 22, 1994

Mr. George Dillon FCC Private Radio Bureau Aviation & Marine Branch Mail Stop 1700C2 Washington, DC 20554

Dear Mr. Dillon:

The National Business Aircraft Association (NBAA) represents business aviation in the U.S. and is supported by 3300 member companies that operate more than 5000 aircraft. They provide American industry with air transportation services, primarily on a not for profit basis. Sixty percent of the Fortune 500 industrial companies are members of the Association. A significant number of the membership also operate internationally to the benefit of world-wide commerce and trade.

NBAA recently had the opportunity to review and inspect the SUPERUNICOM system now operating at the Potomac Airfield in Prince George's County, Maryland. The system demonstrated has the potential to improve public safety and spectral efficiency by providing all-hours landing area advisories over presently assigned Common Traffic Advisory Frequencies (CTAF).

NBAA is favorably impressed with the system's capabilities. We ask the FCC to amend the appropriate regulatory and licensing requirements of 47CFR as necessary to allow the development and validation required precedent to and ultimate implementation of this technology. We would be pleased to assist in any manner to proceed toward authorizing such technology for aviation's use.

Sincerely,

William H. Stine, II

Senior Manager, International & Flight Technology

cc: David Wartofsky | ws/dwa



General Aviation
Manufacturers Association

1

1400 K Street NW, Suite 801 Washington, DC 20005-2485 (202) 393-1500 • Fax (202) 842-4063 May 4, 1994

George Dillon
Federal Communications Commission
Private Radio Bureau
Aviation & Marine Branch
Mail Stop 1700C2
Washington, DC 20554

Dear Mr. Dillon:

I am familiar with the "SuperUnicom" technology developed by Mr. David Wartofsky at Potomac Airfield, Ft. Washington, MD. I understand that a Development License has been issued.

Apparently, the SuperUnicom system sufficiently emulates existing and approved UNICOM/CTAF services. Its use should be currently authorized under existing FCC regulations.

This technology could make a significant contribution to the margin of safety at uncontrolled general aviation airports. I urge the FCC to expedite licensing.

Sincerely,

Ron Swanda

V.P. Operations





DEPARTMENT OF THE NAVY OFFICE OF THE CHIEF OF NAVAL OPERATIONS WASHINGTON, DC 20380-2000

IN REPLY REFER TO

Mr. George Dillon
FCC Private Radio Bureau
Aviation & Marine Branch
Mall Stop 1700C2
Washington DC 20554

May 10, 1994

Dear Mr. Dilion.

This is an unsolicited letter of recommendation for the SUPERUNICOM system currently operating at Potomac Airport, MD.

As Head of the Trainer Aircraft and Undergraduate Flight Training Section for the Department of the Navy and perspective Commander, Fighter Wing, U.S. Atlantic Fleet my position requires frequent briefings concerning the acquisition of new aircraft/aviation programs for Naval Aviation. As a private aircraft owner and pilot I relied on this background in my assessment of what I consider a very promising system, the SUPERUNICOM, developed by David Wartofsky.

This system, in conjunction with its projected afford ability, could provide a significant opportunity to enhance "Small Airport" safety. Timely knowledge of environmental conditions is a cornerstone safety parameter for General Aviation. Easy airborne access to current airport environmental information is obviously beneficial and is available at larger airports utilizing ATIS or AWOS. SUPERUNICOM provides similar information by transmitting "on demand" interactive advisory data over the Common Traffic Advisory Frequency (UNICOM). Its operation on the UNICOM frequency, in my opinion, is the key to its success at uncontrolled General Aviation airports.

I most strongly encourage the FCC to expedite the licensing and regulatory process for this needed technology.

Captain Dale O. Snodgrass, USN

cc: David Wartofsky

LEE H. HAMILTON
STH DISTRICT, INDIANA

COMMITTEES.

COMMITTEE ON FOREIGN AFFAIRS

JOINT ECONOMIC COMMITTEE

Congress of the United States Pouse of Representatives

20515-1409 € 20515-1409

July 18, 1994

2187 RAYBURN BUILDING WASHIMETON, DC 20515-1409 TELEPHONE (202) 228-8318

DISTRICT OFFICE:
107 FEDERAL CONTER
RIII NIMO 85
1201 EAST 10TH STREET
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TELEPHONE: (812) 288-3999

TOLLFREE NUMBER (800) 882-3232

Mr. George Dillon FCC Private Radio Bureau Aviation and Marine Branch Mail Stop 1700C2 Washington, DC 20554

Dear Mr. Dillon:

My staff assistant, Marianne Buckley, a pilot who instructs at Potomac Airfield, has informed me that the FCC rulemaking for the Superunicom now in operation at Potomac Airfield and Bay Bridge Airport in Maryland is in progress. I am writing to offer my support for the authorization and implementation of the Superunicom.

I understand this technology would enhance public safety by providing landing area advisories 24 hours a day using the frequency already assigned.

Pending the completion of this rulemaking process, I would be in favor of an interpretation of the current FCC regulations that would permit this technology to be available today.

Thank you for your attention to this matter.

LEE H. HAMILTON, M.C.

434 Kentucky Avenue Washington, DC 20003 17 June 1994

Mr. George Dillon FCC Private Radio Bureau Aviation & Marine Branch Mail Stop 1700C2 Washington, DC 20554

Dear Mr. Dillon,

This is a personal letter of recommendation for the SUPERUNICOM developed by Mr. David Wartofsky and currently operating at Potomac Airfield in Fort Washington, Maryland. I state that this is a personal recommendation because I have neither sought nor received an endorsement from the company, agencies, or institutions for which I work.

Recently I have been operating an aircraft out of Potomac Airfield and have witnessed the development of the system and have been the direct recipient of its functions and improvements. Easy access to current airport conditions is of great value to the safety of business and private aviation operations at uncontrolled General Aviation airports. Providing this information over the common traffic advisory or unicom frequency via SUPERUNICOM accomplishes this in an on-demand, affordable manner. Although this is my personal viewpoint, in reaching this assessment I must acknowledge the influence of my background as a Lead Engineer with The MITRE Corporation's Center for Advanced Aviation System Development, a Senior Member of the American Institute of Aeronautics and Aerospace (AIAA), the Chairman of the AIAA General Aviation Systems Technical Committee, the Chairman of the Federal Aviation Administration's Airport Surface Traffic Automation Technical Interchange Group, and a commercially licensed pilot of airplanes and helicopters.

I therefore strongly encourage the FCC to give due consideration to the benefits of this system and through its regulatory and licensing authority allow the development, validation, and eventual implementation of this system.

Doyle T. Peed Lead Engineer

c: David Wartofsky

APPENDIX E

PRELIMINARY LEVEL OF INTEREST

STATE AVIATION OFFICIALS

James Bland, Director Virginia Dept. of Transportation, Aviation Administration William Bruzzese, Director, Vermont Agency of Transportation
Harold Buker, Pres. National Association of State Aviation Officials
James Greshel, Adm., Michigan Dept of Transportation, Bureau of Aeronautics
Redge Meierhenry, Administrator, Montana Dept of Aviation
Owen Miyamoto, Airports Administrator, State of Hawaii, Dept of Transportation
Bruce Mundie, Maryland Aviation Administration, Regional Airports
Roger Pfeiffer, Asst Dir. North Dakota Aviation Commission
Wayne Pickerill, Planning & Develop., Idaho Transport Dept, Div. of Aeronautics
William Trussell, Program Director ARINC, Airports
Gary Vachon, New York Dept. of Transportation, Aeronautics Division
Fred Vogt, Administrator, Tennessee Dept of Transportation Office of Aeronautics

FEDERAL AVIATION ADMINISTRATION

Harold Becker, Mgr FAA Airspace Rules & Aeronautical Information Division Myron Clark, FAA Weather Systems
Ken Crowse, Dir FAA Automated Weather Systems
Louis Cusimano, Mgr FAA Genl. Aviation Flight Standards
Steven Isaacs, FAA Flight Standards
Doyle Peed, Chairman FAA Airport Surface Technical Interchange Group
Neil Planzer, Director, FAA Air Traffic Plans and Requirements
Quentin Taylor, Airports Division
Rachel Tretchick, FAA Office Acquisition & Grant Management
Richard Weaver, FAA Eastern Region

MILITARY

Adm. Dale Snodgrass, Commander Atlantic Fleet, NAS Oceana Fred Martino, Mgr, Debra Cabral, Asst. Andrews Air Force Base

TRADE ORGANIZATIONS

Doug Helton, VP Regulatory Policy, Aircraft Owners & Pilots Association (AOPA) William Stine, Sr. Manager, National Business Aircraft Association (NBAA) Ron Swanda, VP Operations, General Aviation Manufacturers Association, (GAMA)

PRIVATE

Peter Bryce, Eagle's Nest Residential Airpark, Waynesboro Virginia Burt Fagan, The Republic International Marketing Group Art Hansen, FAA Director of Weather Systems, (retired) Michael Hurst, Dir Operations, Petroleum Helicopters Inc Renny Manual, Winchester Regional Airport Authority Doug Mcneely, Gaitherburg Airport, Gaithersburg Maryland Bob Oberlander, Montgomery Airpark Pilot's Association David Sclair, Residential Airpark Association